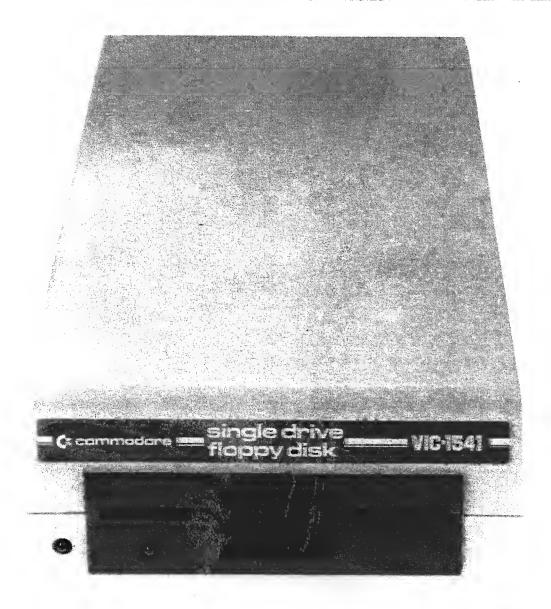
# Commodore Single Disk Drive

# **Technical Manual**

Model 1540/1541





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### Chapter One

### 1.1 Scope

In this chapter, a desciption is made of the proceedures necessary for servicing the Model 1540/1541 Floppy Disk Drive.

### 1.2 Unpacking

Special care should be exercised during unpacking not to damage the unit.

Unpacking proceedures are as follows:

- a) Remove cardboard sleeve from styro-foam box
- b) Open 'styro-foam' box and remove drive
- c) Check the drives front door for proper operation

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<b>t</b>	t
Do Not Use Magnetized Tools	t
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### 1.3 Protection against noise

A week signal from the media is detected in the head section of the drive. Hence, do not install the drive near a TV set or other areas where electromagnetic noise is generated. (i.e. motors, airconditioners, etc)

### 1.7 Input/Output Cable

The length of the cable between the host and the drive (between the host and the last drive when the drives are daisy chained) should not exceed 5 meters (16 feet).

### 1.8 DC power source

The drive is powered by a internal power supply providing the drive with +12V and +5V.

### 1.9 Initial inspection

The drive can be briefly inspected for its operation by the following proceedure. Install the drive, connect the power and I/O cables. Turn drive on and make sure the front panel power lamp is on. Proceed to step 2.2.

### 1.10 Outline of functions

The 1540/1541 Minifloppy Disk Drive mechanism is composed of the data read/write head, track positioning mechanism, spindle drive mechanism and eject mechanism.

### 1.11 Read/Write Head

The Read/Write head uses a glass-bonded, ferrite/ceramic head. Track-to-track erasing is accomplished by the straddle erase method. The surface of the Read/Write head is mirror-ground to minimize weear of the head and media. Also, the head is designed in such a way that the maximum signal can be obtained from the media surface.

### 1.12 Track positioning mechanism

Positioning of the Read/Write Head is accomplished by a stepping motor and steel belt. The stepping motor rotates clockwise or counter-clockwise by two steps per track. The control circuit on the logic board selects the direction and number of step to the desired track.

### 1.13 Spindle drive mechanism

The spindle drive motor operates on 12 VDC and turns the spindle, through a belt drive, at 300 revolutions per minute. The speed of the drive motor is controlled by a feedback signal from a tachometer which is housed in the drive motor assembly. The feedback signal controls a servo amp that supplies the 12 VDC drive current.

### 1.14 Eject mechanism

When the media is inserted in the Disk Drive and the door is closed the media is clamped by the spindle and hub. At this time the ejector mechanism is loaded by the insertion of the disk and locked. When the door is opened, the ejector mechanism is unlocked and the media pops out of the door.

### 2.1 Mechanism Explanation

The 1540/1541 mechanism is installed in the system horizontally, however the drive will fuction if mounted vertically. The mechanical parts of the drive include an aluminum chassis, a stepping motor, head positioning assembly, drive motor, a hub and spindle assembly for centering and retaining the media during operation. The magnetic head is of a glass ceramic construction.

### 2.2 Function explanation

The drive is itself an independent memory device. The drive is composed of a media clamp rotating mechanism, ahead positioning mechanism and an eject mechanism. When the front door opens, the media can be inserted. All positioning operation excluding insertion and removal of the media are controlled by the internal guide mechanism. Closing the front door causes the media clamp mechanism to operate. Two operations are performed in the following order:

- a) The media is centered.
- b) The media is clamped and retained between the spindle and the hub.

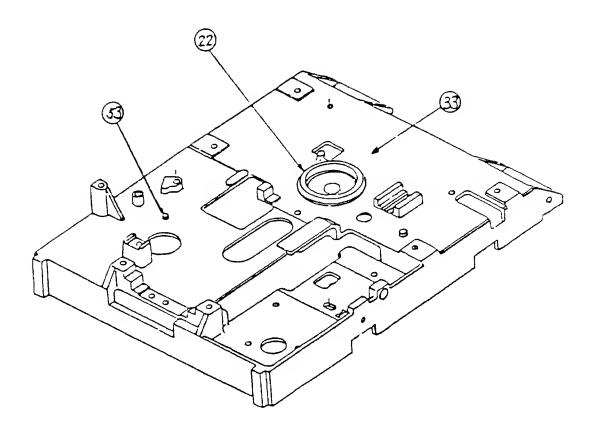
The spindle and hub rotate at 300 r.p.m. through a closed-loop control circuit employing a D.C. motor/tachometer. It is important that the relationship between the head and the media is maintained correctly during operation. For this purpose, a pressure pad is used to hold and press down the media(about 12g) from the opposite side of the head, to maintain the correct contact with the head. This head assembly is coupled by a metal band to a four phase stepping motor the performs the track positioning. One step of the stepping motor corresponds to a 1/2 track movement. Use of a high-speed stepping motor and metal band drive, this series of disk drives can perform access operations at a very high speed.

### 2.3 Assembly Proceedure

- 2.3.1 The housing assembly; install the eject pin and the spindle.
- 2.3.2 The housing assembly; on the reverse side install the spindle pulley.

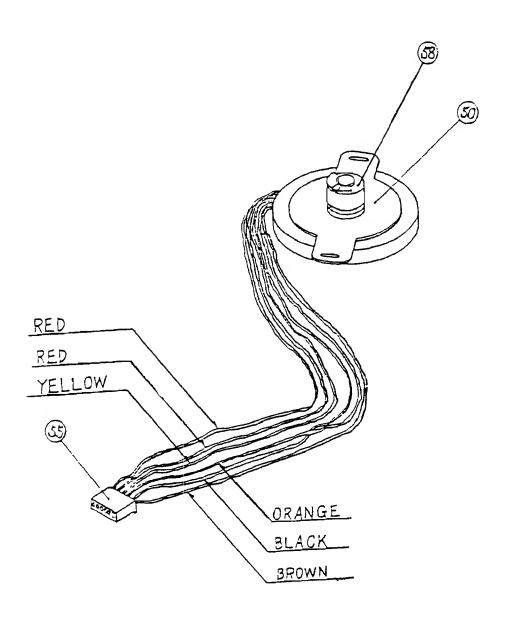
# 2.3.3 FIG 1, The housing unit.

Part	Desciption
22	spindle
33	housing assembly.
53	eject pin



- 2.3.4 The stepping motor assembly; install the stepping pulley.
- 2.3.5 FIG 2, The stepping motor unit

Part	Description
50 55 58	stepping motor assembly connector housing stepper pulley



- 2.3.6 The D.C. motor assembly; install the motor pulley.
- 2.3.7 FIG 3, D.C. motor and control PCB

Part	Description
44 48	motor control PCB
51	connector housing
59	D.C. motor pulley

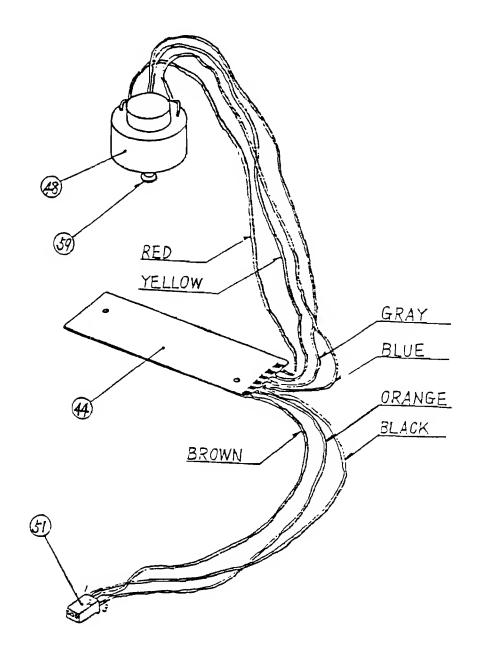
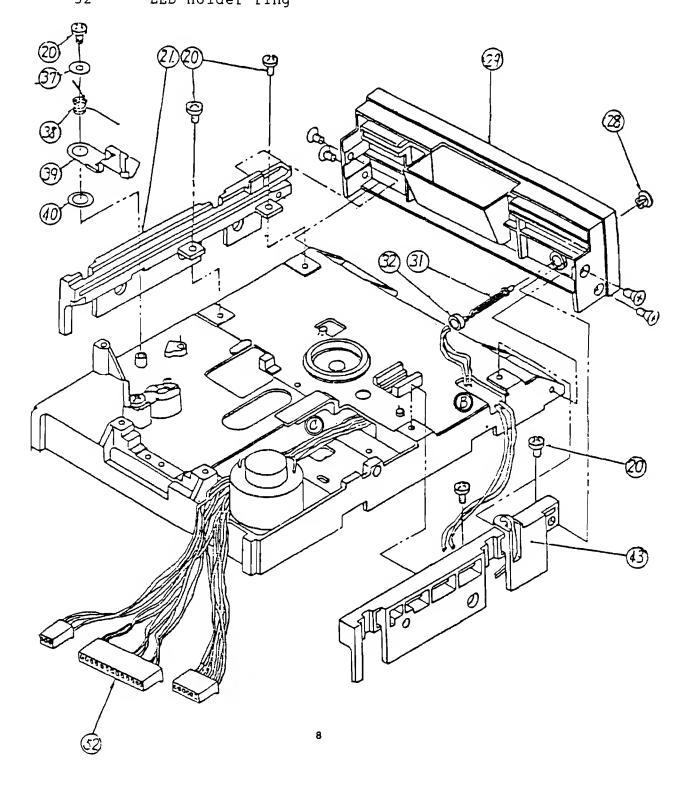


FIG. 6

Part	Description	Part	Description
20	binder screw	37	washer
21	diskette guide	38	eject spring
28	LED clamp	39	eject plate
29	front panel	40	slider
30	Flush screw	43	diskette quide
31	LED assembly	52	connector housing
32	IFD holder ring		3



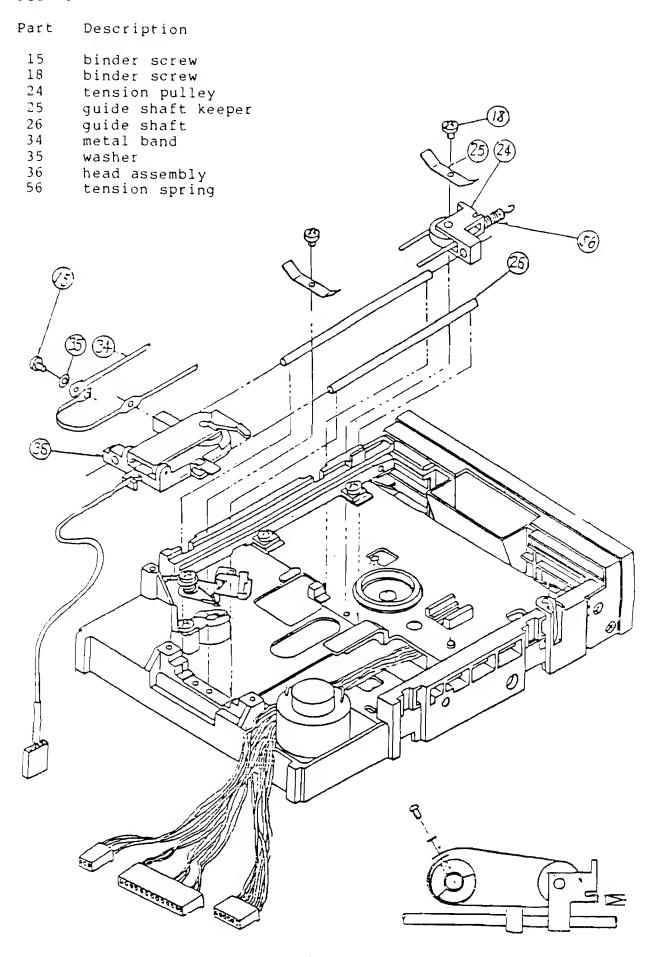
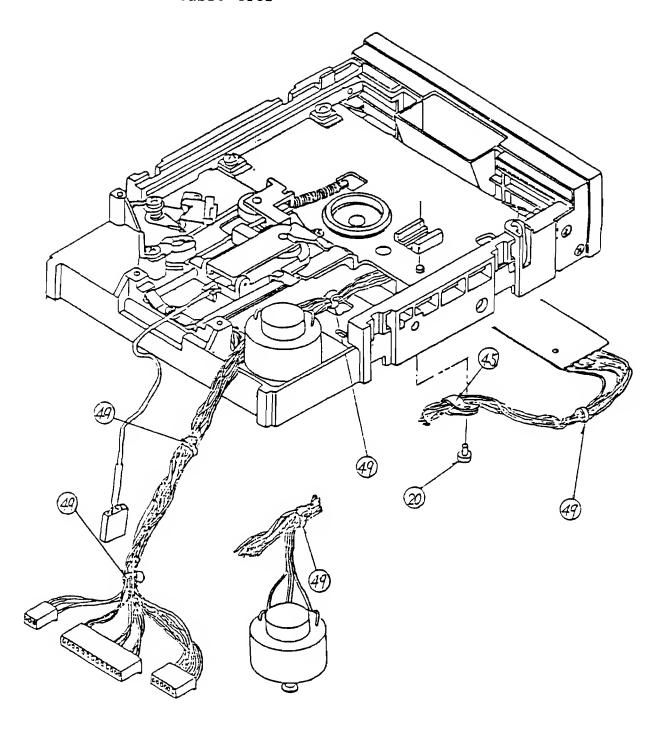
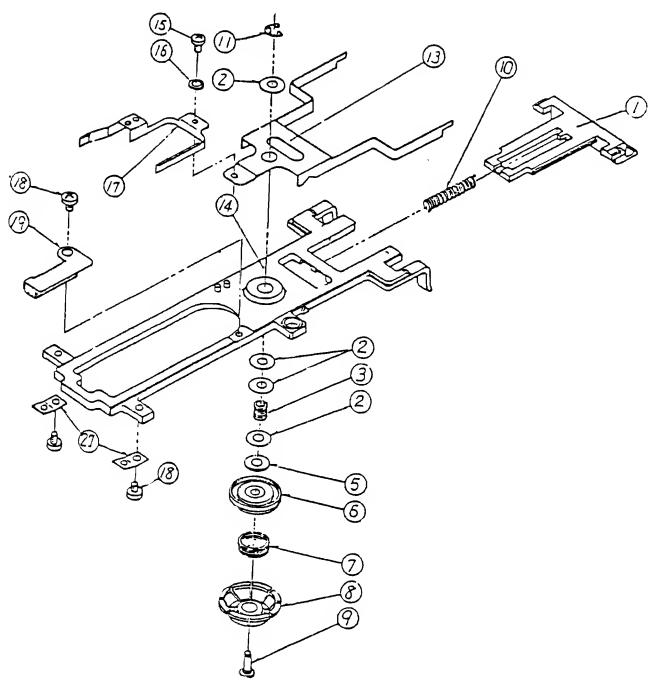


FIG 8

Part	Description
20	binder screw
45	cable clamp
49	cable ties

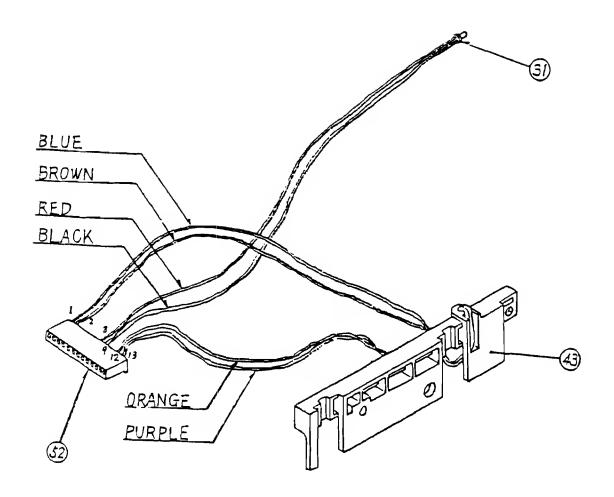


Part	Description	Part	Description
1 2	door assembly collar	13 14	hub support hub frame
3 5	clamp spring	15	binder screw
6	thrust washer collet assembly	16 17	spring washer arm support assembly
7 8	hub spring hub	18 19	binder screw pad plate assembly
9 10	hub shaft	27	hinge spring
11	door spring E-washer	60 61	collet collet bearing



# 2.3.8 FIG. 4, Diskette guide, LED assembly and connector housing.

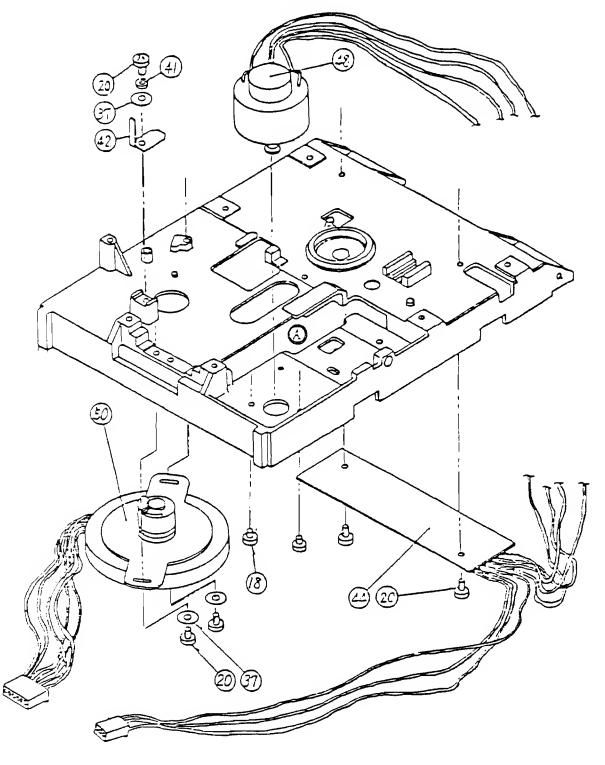
Part	Description
31	LED assembly
43 52	diskette guide connector housing



- 2.3.9 Secure the D.C. motor from the reverse side of the housing assembly with two screws.
- 2.3.10 Put the motor control PCB into hole 'A' and serure it with two screws.
- 2.3.11 Secure the stepping motor with two screws.
- 2.3.12 Secure the carraiage stopper with a screw.
- 2.3.13 Install the connector housing '52' into the hole 'B' and remove through hole 'C'.
- 2.3.14 Sercure the two diskette guides '21' and '43' with two screws each.
- 2.3.15 Install the LED holder in the front panel.
- 2.3.16 Insert the LED assembly into the LED holder ring.
- 2.3.17 Install the led into the LED holder, then push the LED holder ring onto the LED holder.
- 2.3.18 Attach the front panel with four flush screws.
- 2.3.19 Secure the eject plate with a screw.
- 2.3.20 Wind the metal band around the tension pulley.
- 2.3.21 Insert the guide shafts into the head assembly. Install the tension pullet as shown in figure 8
- 2.3.22 Secure the guide shaft keepers by two screws each.
- 2.3.23 Wind the metal band around the stepper pulley and secure it with a screw to the stepper motor pulley.
- 2.3.24 Hook the spring to the tension pulley and install unit in the slot in the housing assembly.
- 2.3.25 Hook the opposite end of the spring to the housing assembly.
- 2.3.26 Fasten cable ties to the cables.
- 2.3.27 Secure the cable clamp with a screw as shown in FIG 8.
- 2.3.28 Secure the arm support assembly with a screw to the hub support.
- 2.3.29 Insert the hub shaft into the hub, the hub spring, the collet assy, the thrust washer, the collar, the clamp spring and two collars.
- 2.3.30 Insert the hub shaft into the frame and the hub support and fasten it at the E-washer.
- 2.3.31 Set the door assembly and the door spring at the hub frame.
- 2.3.32 Secure the pad plate assembly with a srew to the frame at the location shown in FIG 9
- 2.3.33 Secure the two hinge springs with two srews each.

FIG. 5

Part	Description
18 20 37 41 42 44 50	binder screw binder screw washer spring washer carriage stopper motor control PCB stepping motor assembly

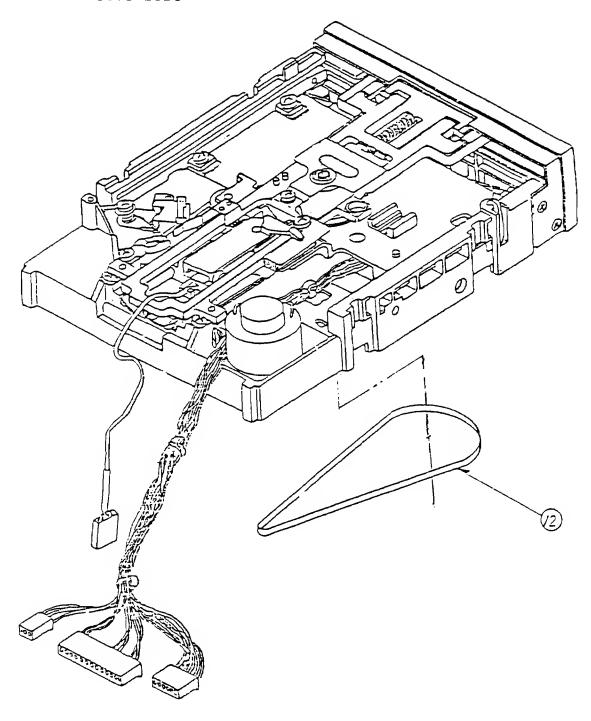


- 2.3.36 Place the belt over the D.C. motor pulley and partially on the spindle pulley.
- 2.3.37 By turning the spindle pulley the rest of the belt will seat completely on the pulley.

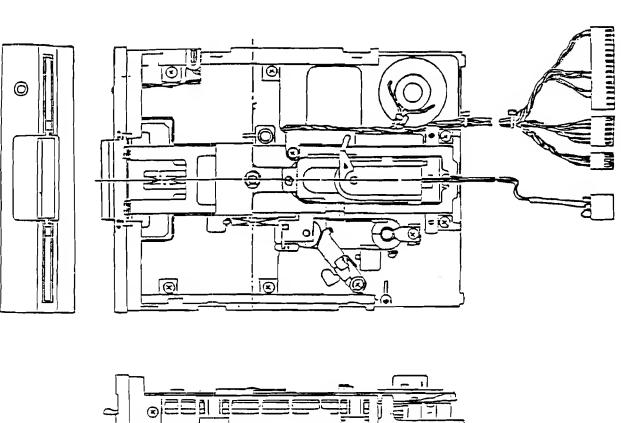
### 2.3.38 FIG 10

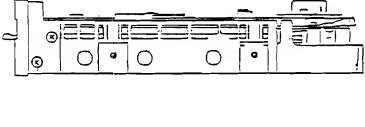
Part Description

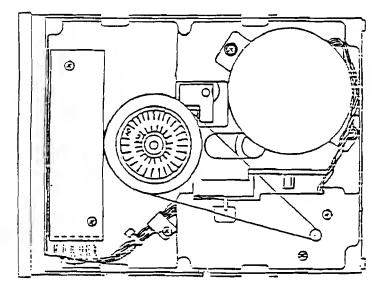
12 drive belt



## 2.3.39 FIG 11; Completed Drive Mechanism







### 3.1 Description

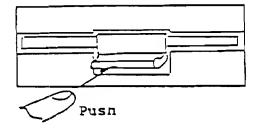
Since the disk drive is placed under direct control of the interface and power supply, no special proceedure is required for starting and operation.

### 3.2 Operating proceedure

Make sure that the power supply and I/O connector are connected, then insert the disk in accordance with the following proceedure.

### 3.2.1 Inserting the media

- a) Apply DC voltage to the drive.
- b) Open the front door.



- c) With the index hole and write protect notch being placed on the left side of the jacket, push the media in, when the media is fully inserted the loacking action can be felt.
- d) Push the door downward and close the door so that it is locked firmly

### 3.2.2 Extracting the media

- a) Open the front door. The media will pop out automatically to a position where you can extract it easily.
- b) For protection of the recorded data, the media should always be stored in its envelope.
- c) Close th door of the drive.

### 3.3 Media handling proceedure

Since the media has been sudjected to awrite operation i naturally contains imformation, adequate attention must be paid to its handling.

In order to extend the life of the media and eliminate the causes of errors, it is best to take the following steps:

- a) When writing something on the jacket label of the media, do not use a ball point pen or pencil, use felt-tipped pens.
- b) **Do not** hold the edges of the media with paper clips or the like.
- c) Do not touch the media exposed in the slot of the jacket.
- d) Do not attempt to clean the media.
- e) **Do not** keep the media in the areas where there is a strong magnetic field.
- f) The diskette should be kept in its jacket.
- g) Special care should be exercised so that the media is kept free from liquid, dust, metal particles, etc.
- h) Take care not to exceed the following environmental conditions:

Temperature 10 to 51°C Relative humidity 8 to 80%

### 3.4 Seek error

Few seek errors will be experienced due to the low stepping rate, less than 12 msec/track. In case of a seek error, however, recalibration of track position can be performed. This can be done by repeatedly stepping the head towards track 0 untill track 0 status is detected.

### 3.5 Write error

In order to check the quality of the data, perform a read-after-write operation. When data can not be read, rewrite that track and sector once again.

When data can not be read after four such operations track is defefective.

#### 3.6 Read error

What happens quite often when performing a read operation is a soft error. A soft error is defined to be a read error which is recoverable by making ten or less read operations. However, in the event no recovery is made in ten operations, move one step from the track in the same direction as the previous step, then return one step. If this fails to read the data, this error is unrecoverable.

### 3.7 Description

Periodic maintenance is indispensable so that this type of peripherial equipment operates properly. It is particularly important to periodically clean the head and check the load pad. Repairs and adjustments should be made in accordance with the proceedures below.

### 3.8 Head Cleaning

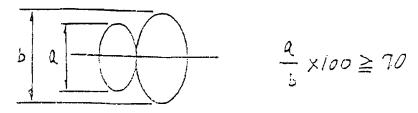
Check for excessive dust or magnetic oxide on the load pad. With the door open (do not move upper arm greater that what is provided by opening the front door) clean head with lint free cotton cloth or 'Q-tip' in 91/ isopropyl alcohol. Wipe the head carefully to remove any dust and/or oxide.

### 3.9 Adjustment proceedure

In case of a malfuction or parts replacement, make the following adjustments. In order to maintain the interchangability of the media between drives it is desirable check each drive against a master alignment diskette.

### 3.9.1 Track adjustment (radial track)

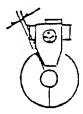
- a) Connect I/O cable an restore the head to track 00.
- b) Insert a 48tpi alignment diskette and close the door.
- c) Connect two oscilloscope probes to pin 1 and pin 14 of UH6 (592), set oscilloscope to angbraic add at 50mV/cm and 200 msec/div.
- d) Load the head and allow it to seek to track 16, check for cats eye wave form. When the cats eye lobe ratio is 70/ or less, loosen the stepping motor mounting screws, turn the stepping motor to obtain the lobe ratio of 90/ or less.
- e) After allowing the head to track 34, return it to track 16 and recheck the cats eye. If the ratio is correct tighten the stepping motor screws.



Cats eye lobe ratio

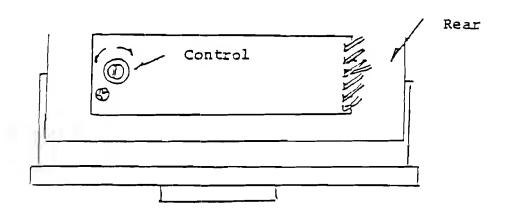
## 3.9.2 Track 00 adjustment

The drive is not provided with a track 00 sensor. To adjust, let the head over step in the track 00 direction and adjust the limiter postion to obtain a clearance less than  $0.25 \, \text{mm}$  ( $0.01 \, \text{inches}$ ).



## 3.9.3 Speed control

Turn the variable resistor on the motor control board untill the tachometer disk on the spindle pulley appears stationary when viewed with a fluorescent lamp.



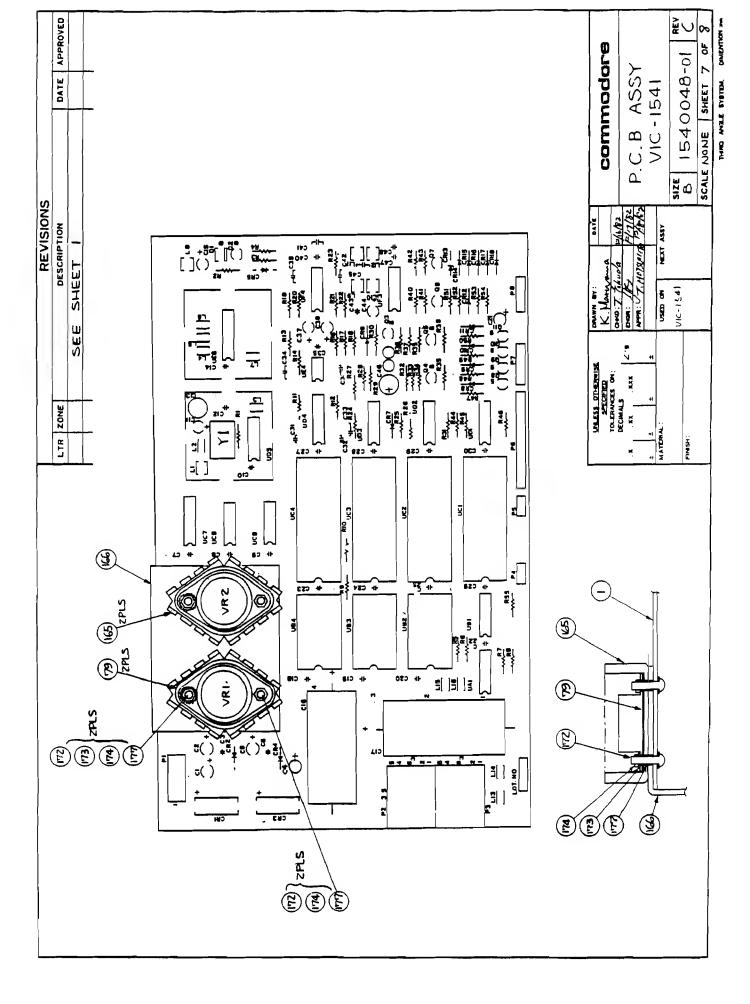
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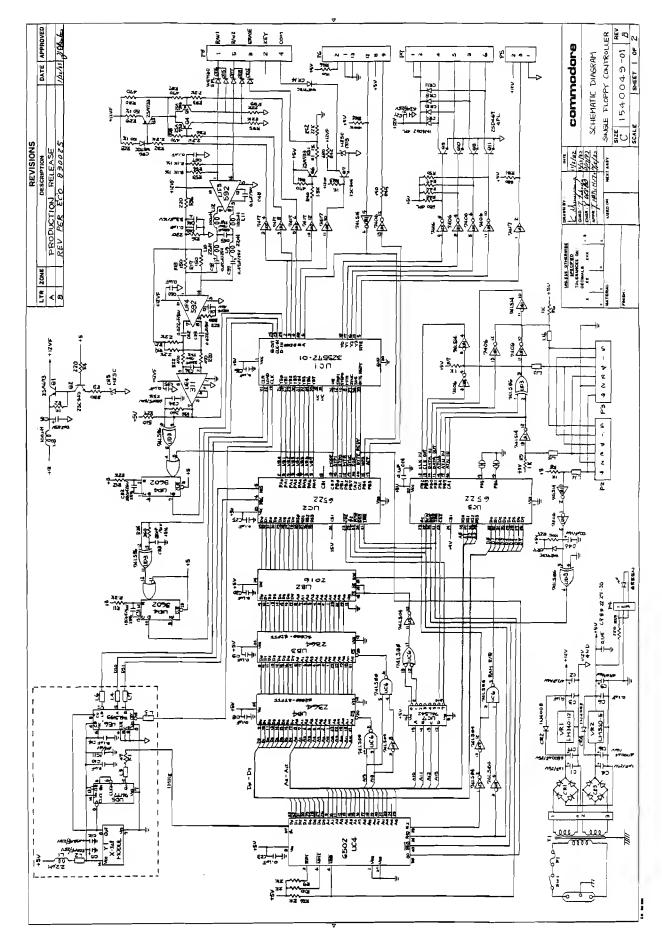
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commodore Pra	ASSY 1	717-1541	DRWN BY:	IV/16/83 ENG	ENGA: 1/C	MI SIZE   15 400 40

### PART NUMBER  #### OF \$28-04 VOLTAGE REQULATOR \$1,1.5A  ###################################	78 B	74 B   90.528-04   Varke Reviving   174 B   90.528-04   Varke Reviving   174 B   90.528-04   Varke Reviving   174 B   90.528-03   Valide Reviving   174 B   90.528-03   Valide Reviving   174 B   90.528-03   Valide Reviving   174 B   90.5281-01   Insulation mile   170 B   92.551-01   Insulation mile   170 B   92.551-01   Insulation mile   170 B   92.551-01   Insulation mile   170 B   90.551-01   Insulation mile   170 B   90.551-01   Insulation mile   170 B   90.551-01   170 B   90.	END MOTES		71-07E M7	LM 340-5 TO-3				SUBSTITUTE FOR ITEM 79.			3													MOLEX 5048-04 AG	3022-06A	3022 -/5 A		MOLEX										
## B PART NUMBER DESCRIPTION  78 9 90/528-04 VOLTAGE REGULATOR SV.1.5A  77 10 9 90/528-04 VOLTAGE REGULATOR SV.1.2A  78 9 9048/4 INSULATION MILAR TO-3  80 9 325551-01 INSULATION MILAR TO-3  81 8 904/50-05 SOCKET IC LOW FRO 40 PRO  81 8 8 904/50-06 SOCKET IC LOW FRO 40 PRO  82 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1	78   9   90/528-04   Varbee RequiATOR   EV. L.SA   176   B   90/528-04   Varbee RequiATOR   21/2A   177   176   B   90/528-03   VolTAGE REQUIATOR   51/LZA   177   178   B   90/528-03   VolTAGE REQUIATOR   17/ZA   17/ZA   18/ZA	REF DE8		VR 1	VR 2							P2, P3													8d	Ld	9 d	P4,P5	Ы										
мэті % % 7 6 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	MAN WAY	2	DESCRIPTION			- 1			HYLAR	ATION			1				IC LOW PRO	IC LOW PRO								ASST. 2.5 MICH		ISPIN	S PITCH	. 3.96 PITCH										
1   1   1   1   1   1   1   1   1   1	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PART NUMBER		po-825/06	90/528-03			ſ	-1			3				904150-06	904150-03								251065-04	325562-06	325562-15	29:	3/6										
	2 - NN N N + M	2 - NN N N N N N N N N N N N N N N N N N		-	-	-	77	90	_	_	/8	82	_		85	78		_	84	30	4:	26	43	94	95	_	97	48	<b>b</b>		101	201	103	104	105	901	loJ	86	<u>5</u>	01
		E CONTRACTOR OF THE CONTRACTOR	-	10		$\leq$																				_	`	_		<u> </u>									$\dashv$	
ANATITY PRODUCE TO ANATITY PRODU			<b>-</b> €	-	⊢┼	-+	_	-			-	-	-	-	-					_	$\vdash$						_	-		+	+	-+	$\dashv$	+	7		$\dashv$	$\dashv$	+	7

		EF	Ø PART NIMBER	DESCRIPTION	TION	REF DES	NOTES
	0	<u>0</u>					
		211	B 900301-04	CAPACITION FLECT.	220 MF/10V	C13	
	E	<u></u>			6800 July 25V	CIT	
		<u> </u>	- 101006		4700mF/16V	CIG	
	<u> </u>	2 115	\$00/00-33		47 MF/16V	C2,C5	
-	-	2 116	900/00-32	ELECT.	182 /JH/	C1, C4	
		-	900402-15	TAUTALIUM	10 MF/ 25V	C15	
		<u>e</u> :	1	MITALINE	3.3 FF / 25V	C44	
		611 /	900010-\$2	CERAMIC	150 45/50	C31	±5%
	1,7	2 120		-	330 PF/50V	C32.C36	7.5%
		_			680pr/sov	C45.C33.C34	1.5%
		/ 122			10000F/ 50V	C41	
	179	E21 42			0./WF/80V	C3.6-10	14.10,19.20,22-30,35,40,43,47,48
			900010 -14	CERNIC	0.022 F/50V	C39,C42	
		125	900100 - 40	ELECT.	100 pF/16V	C46	
		921 2	11-200006	TANTALIUM	0.47 F/25V	C37,C36	
		_	-		4.7 WF/25V	(2)	
		821 /	1 900402	TANTALIUM		C11	
		129	B 900465	CAPAC/70/ CERANIC	0.033 pt/25V	C12	
		130		ı			
		181					
		281					
		133					
		/ 134	B 90/550-56	RESISTOR CARBON	ULT 410	RI	
		2 135	B 90/550-108	RESISTOR CARBON	MW15% 3600	R14, R24	
		921 \$	68-		1500	RF7.18.45.46	
	7	181 4	-52		250 ח	R4,16,36,55	
		2 138	-/4		3300	K3,R23	
		184	- 48		410 u	K20,22,30,51,39 44	1
		1 140			0 0/S		
		6 HI	E-		U089	R31,42 41-50	
		6 142	10-		/ KQ	KZ,5,6,7,843	
		3 143	-53		2 kū	R9, 10, 26	
		6 144	8/-		2.2 KD	RI1,19,21,32-34	
		/ MS	69-		1.5kg	R40	
	Ì	4 146	2/-		22 KA	R12,35,39,52	
		2 47	B 90/550-07	RESISTOR CARBON	14W ±5% 100KR	R25 R44	
		3					
	enchommon		Ç	1 7 21 - 717	DAWN BY!	11/1/32	HE NATE OF THE PER BH
	יי כ		PCD ASSI.	- ナウ- リー	CHKD		<u>၂</u>

8	QUANTITY REGO PER	Ļ					
	ARI / UASH NO.	iari Li	8 PART NUMBER	DESCRIPTION	REF DES	NOTES	
		ō			$\downarrow$		
		<u>-</u> ₹	B 90/75/-	RESISTOR METAL ONDE XW II % 410.			
		/ 150		000	Rab		
		12	-	- 1	829		
		2 152	B 901751	RESISTOR HETAL OXIDE YOUTH 9.1KA	853, R54		$\neg$
_		153	3				
		<u>x</u>					
		(55	10				
		156	-4				
		IST					
		10 158	10-695526 8	FERRITE BEAD	91-81'6-27		
		S 159	B 903025-01	FERRITE BEAD	91-61.7-51	SUBSTITUTE FOR ITEM 158.	
		160	0				
_		17					
		291	7				
		2 163	B 4022048	SHIELD BOX			
		2 14	63	SHIELD CAP			
		2 165	63				
		791 /	B	HEAT SINK REGULATOR			
		167		T DINUO			
		89)	60				
		169					
		170					
		11					
		4 172	2 325541 - 05	SCREW AND HEAD /EXT TWOTH WASHER 143-12			
		2 173	B 905655-	EXTERNAL TOOTH WASHER M3			
			1 B 905960-03	МЗ			
		175	2				
		116					
		4 177	1 B 905477-02	TUBING VINTL 3.5 PMX SMM			
		138	60				
		174					
		180	0				
		181					
		182	7				
		[13]	9				
		184	4				
		e	5				
Č	commodera		(	-	HAL 193	12/1/2 BIZE BIZE	
		ו	PCB ASSY.	VIC-1541	/In/	1 126 B 1540040 C 9	œ,
							l





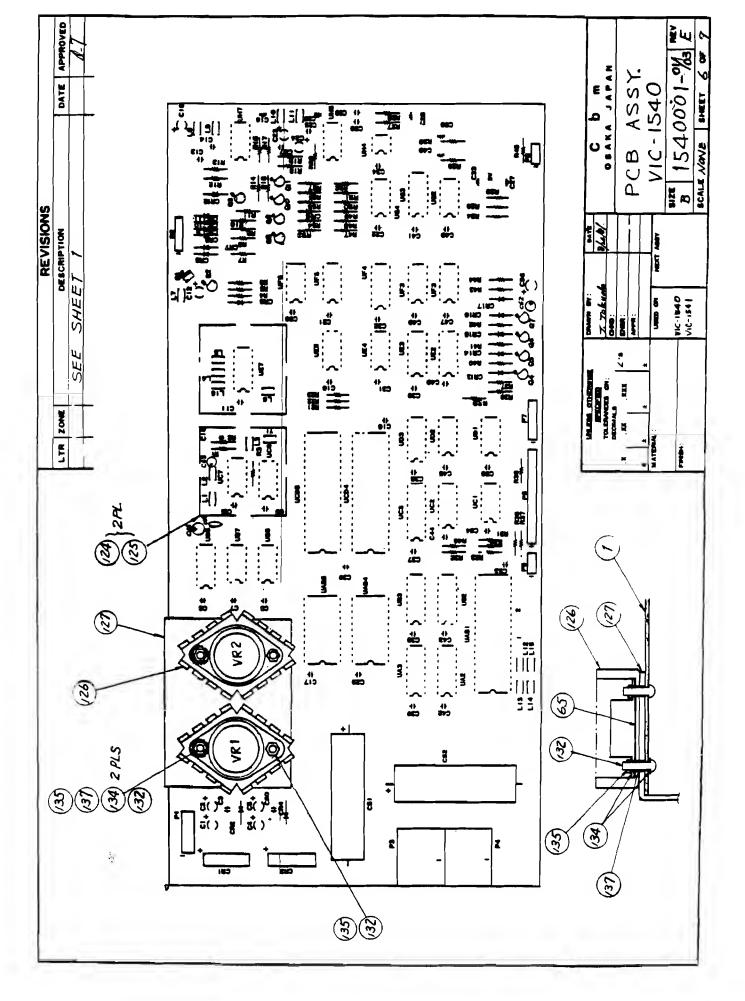
A Flore PRODITION RELEASE	UL B 1/2 ADDED SHEET 6 OF 7 (FOR FCC)  C 8/3/2 ADDED DASH -03 AND -04	UL D "Zerga ADDED ITEM 6. E 1/5/P1 REVISED PER ECO 830084	[2] THIS ROM CAN BE USED ON ONLY USA CANADA AND JAMANS VERSION FOR SUBSTITUTE FOR ITEM 35,	1. SHEET 687 OF 7 ME B-SIZE ASSY DWG. NOTES.	DRAWN BY DATE SIZE   SAME SIZE   SAME   SAME
PART NO. DESCRIPTION	154 0001 -01 PCB ASSY VIC-1540 (FCC)	1540001 -03 PCB ASSY VIC-1541(FCC)			c bm engineering

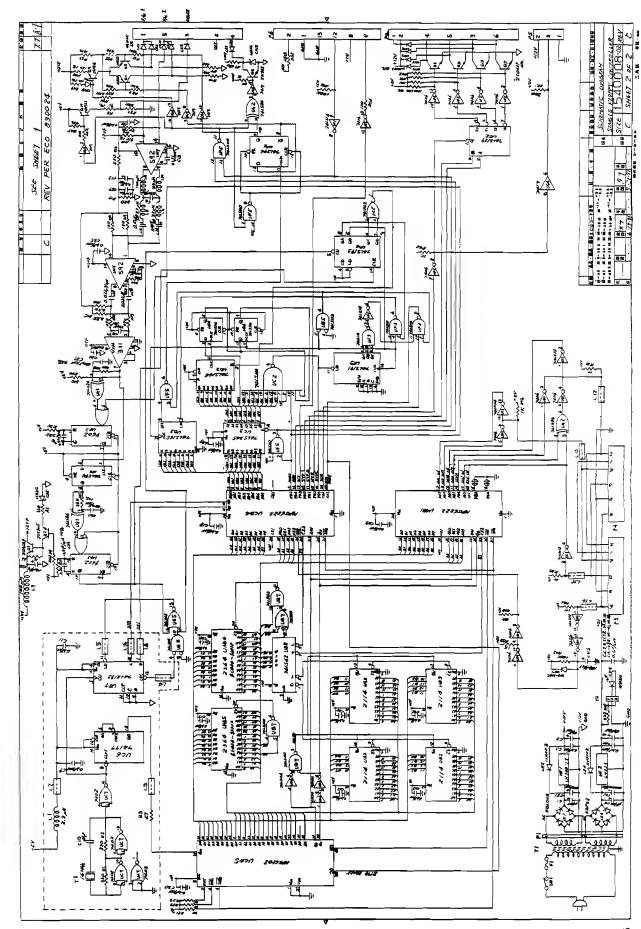
QUANTITY REGO PER PART/DASH NO.	MGL	. <b>2</b> .	PART NUMBER	DESCRIPTION	TION	REF. DES	NOTES
103	ò	a					
		2	1540007	P.C. BOARD 315x.	315×155×16t		MIL: 6LASS EPRXY 6-10
	1 >						
	*	7 2	1540008-01	SCHEMATIC DIAGRAM	AGRAM		
	7	9	90/229-03	1C 2364-197	197 ROH	UABS	\$E000 ~ SFFF
	/ 2	8	90/435-01	IC MPS 6502	//d3	VCDS	
	0 /		325302-01		130 ROM	UA04	\$ CODO ~ SDFFF
	6 /		325303-01	2364-131		UABS	\$ Eddo ~ & FFFF
7	2 10		901437-01	MPS 6522	VIA	UMBT. UCD4	
7	11		10-1271-01	MPS 2114	RAM	UAZ,3.UBZ,3	
2	2 /2		10-125106	746500	2-NAND	U87, UFS	
	1,13		12-125106	746502	2-NOR	VES	
	/ /4		90/521-02	741504	/W/	786	
	>/		90/52/-24	741510	3-NAND	UF3	
	9/ /		901521-30	7415/4	SCH. INV.	uct	
	1/2		901521-17	745745	DEC.	088	
2	2 18		901521-06	74 65 74	D-FF	UE4, UF6	
7			901521-32	7445 86	2-Ex-0R	790	
/	05 /		901521-15	7465133	13-NAND	220	
	/ 3/		901521-18	7415 139	Den. P	UEZ	
/	( /		901521-28	7415 164	& Bit Shift Res	UDZ	
	1 33	_	901521-12	7415 165	8 Bit Stile Res	Ean	
,	メア/		901521-40	1615744	4 Bil Court.	<i>UE3</i>	
2	2 25		_ '	2465 193	4 Bit Count.	VE7. UF4	
	75 /		901521-45	7415 245	Bus. Tranceiner	lK3	
7	<i>کد /</i>		901522-32	7402		120	
2	2 28		901522-06	7406	/WV. OC.	UDI. UFZ	
	/ J9		901522-03	74177		920	
7	1 30		901510-01	2098		U63	
	<u>ئ</u> ر	-	901523-04	LM311		UH4	
2	دي 2	В	901523-08	NE 592		UHS.UH7	
	6بو /		90/522-01	7417		164	
S	S 36	-	901521-54	1415197		920	SUBSTITUTION FOR ITEM 29
S	7	В	20-622/06	2364-7	186 ROM	1/AB5	SEDDO ~ SFFFF SUB. FOR ITEM
\( \frac{1}{2} \)	کار	8	901229-01	IC 2364-173	ROH	UABS	BEDDO - SFFFF SUB. FOR 1784 6.
c b m ENGINEERING	TITLE	ر کونوا			DRAWN BY: DATE		BATE SIZE

17   8   902671   1RW/S/STOR NPN   250.245   92.43   SUBSTITUTION FOR ITH   9026873 - 01   NPN   250.245   90-37   SUSSTITUTION FOR ITH   9026872   NPN   250.2160   90-31   SUBSTITUTION FOR ITH   9022672   NPN   250.2167   90-31   SUBSTITUTION FOR ITH   9022672   NPN   250.2167   90-31   SUBSTITUTION FOR ITH   9022672   SUBSTITUTION FOR ITH   9022672 - 02   SUBSTITUTION FOR ITH   90206873 - 04   SUBSTITUTION FOR ITH   902068 - 04   SUBSTITUTION FOR ITH   902069 - 04   S	PART/DASH NO.		3	D. S.	PART NUMBER	DESCRIPTION	HEF. DES	MOTES
S   90 2693 - 01		3 ~	-			NPN 250945	2, 03	
4   970   670   68   750   7		\v.	-		93-	NPN 25C/8/5	, 43	SUBSTITUTION FOR ITEM 37
State   Colores   Colore		4	_	0		250467	40-1	
141   \$\frac{902720}{402720}		· ·		, ,	902687	2502120	10-1	SUSTITUTION FOR ITEM 39
4.22   9.027/7     PNP 2.5A733   03-011   SUBSTITUTION FOR ITE     5.41   9.902749-0  IRANSISTOR PAPP 2.5A1015   08-011   SUBSTITUTION FOR ITE     4.42   9.902749-0  IRANSISTOR PAPP 2.5A1015   08-011   SUBSTITUTION FOR ITE     4.43   9.902850-02   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.41   9.902850-02   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.42   9.902850-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.43   9.902850-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.44   9.902850-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.45   9.90848-11   IRANGE STAN SOOMN IS STAN ON ITE     5.46   9.908550-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.47   9.900755-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.48   9.908550-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.49   9.908550-03   SIGNAL INVEOCE   08-011   SUBSTITUTION FOR ITE     5.40   9.90850-03   SIGNAL INCOMEDIAL		-	_		902720	25A 673	0,0	
S. 41   8   90.2744-0/   TRANSISTOR PIP   25A/0/5   68-0/1   SUBSTITUTION FOR ITE     S. 44   8   90.0250-02   DIQDE, SIGNAL   INFO02   ats.is.is     S. 42   8   90.0250-02   DIQDE, SIGNAL   INFO02   ats.is.is     S. 42   90.0250-03   SIGNAL   INFO02   ats.is.is     S. 43   90.0250-03   SIGNAL   INFO02   ats.is.is     S. 44   90.0250-03   SIGNAL   INFO02   ats.is.is     S. 45   90.0250-03   SIGNAL   INFO02   ats.is.is     S. 47   90.0250-03   SIGNAL   INFO02   ats.is.is     S. 47   90.0250-03   SIGNAL   INFO02   ats.is.is     S. 47   90.0250-03   SIGNAL   INFO02   ats.is     S. 47   90.0756-0/   SIGNAL   INFO02   ats.is     S. 48   90.0556-0/   SIGNAL   INFO02   ats.is     S. 49   90.0556-0/   COL. INDUCTOR   SIGNAL   INFO     S. 49   90.0556-0/   COL. INDUCTOR   SIGNAL   INFO     S. 49   90.0556-0/   COL. INDUCTOR   SIGNAL     S. 49   90.0556-0/   COL. INDUCTOR   SIGNAL   INFO     S. 49   90.0556-0/   COL. INDUCTOR   SIGNAL     S. 49   90.056-0/   COL. INDUCTOR   SIGNAL     S. 49   90.056-0/   COL. INDUCTOR   SIGNAL     S. 49   90.056-0/   COL. INDUCTOR   SIGNAL		4		6	902717	25A 733	110-1	
5 44 B         9 CO 5 S 2 - 30         IC 740 7         UG4         SUBSTITUTION FOR ITE           6 46 B         9 CO 5 S C - 02         DIODE, SIGNAL, IN 4 CO 2 C C C C C C C C C C C C C C C C C		· ·		-	902744	PNP 25A1015	110-1	SUBSTITUTION FOR ITEM 42
44   8   POOZSO-02   DIGDE, SIGNAL INVEOCE   CHEM. 17.0     8   1		6		-	901522		34	SUBSTITUTION FOR ITEM 33
6   6   900750-02   \$\text{SignAll   MyG022   \$\text{circless} \text{circless} circles			_	110				
2 47         900850-05         SIGNAL MG713C         CRN.17.7         SUBSTITUTION EQR ISB. B           5 48         900850-01         3ENRAL M414B         CRS         M432-2           5 48         325505-01         3ENRAL M415K         CRS         M32505           5 47         325505-02         3.3V SOOMN 15K         CRS         M32506           5 47         900948-06         3.3V SOOMN 15K         CRS         M32506           1 5 5506-01         1 SENER 5.1V SOOMN 15K         CRS         M32506           1 7         1 SENER 5.1V SOOMN 15K         CRS         M3250           1 8         1 SESOS-01         1 SENER 5.1V SOOMN 15K         CRS           1 8         1 SENER 5.1V SOOMN 15K         CRS         M3250           1 8         1 SENER 5.1V SOOMN 15K         CRS         M3200           1 8         900755-02         CRYSTAL AMHE         TI           1 8         900755-02         CRYSTAL AMHE         TI           1 8         325513-02         COLL, MDUCTOR 22 MH         TI           1 8         900558-02         VOLTAGE REGULATOR 5V 3A         KR         LM320           2 60         325513-03         COLL, MDUCTOR COLL         LM320         LM320		7		_	100	11/4002	1,13-16	
3   9   9   0   0   5   0   0   0   0   0   0   0		•				W/F 71.8 C	11.47.18	
3   3   5   5   5   6   6   6   6   6   6   6		1			10-038000	11/4/48	8/11/11	SUBSTITUTION FOR ITEM 47
3.45   3.25.605 - 0.2   3.3V   500mW   1.5%   cris   H2 44 - 1   SUB. H5     3.57   900 948 - 0.6   3.3V   500mW   1.5%   cris   H2 5C - 2     3.54   900 948 - 0.6   1.33V   500mW   1.5%   cris   H2 5C - 2     3.54   900 948 - 0.6   1.5   1.5   1.5   cris   H2 5C - 2     3.54   900 948 - 0.6   1.5   1.5   1.5   1.5   1.5     3.55   900 948 - 0.6   1.5   1.5   1.5   1.5   1.5     3.55   900 0556 - 0.7   1.5   1.5   1.5   1.5   1.5   1.5     3.55   900 0556 - 0.7   Crit.   MDWC TOR   C2 MH   C1   C1   C1   C1   C1   C1   C1   C		1			325505-01	ton 11 15%	با	
325506-0    1 5.1V 500mW ± 5%			_		325505-02	500 W I 5%	25	
1		2 0	-		000008-04	*** + / TE OO -	<b>y</b>	0,10
15   525506 - 01		2	-		37550	SUCHW TO	2 3	
S #3   \$700#48-11   \$\$\text{TENER 5.1V 500mw # 55% CR12   \$\text{MS231} \text{Sub. F.}   \$\text{1.52} \text{1.52} 1.52		-	-	2	372506 -01	5.1V 500 MW #5%	2//	
15t   900756-01   18RIDGE 1.5A 50V   CR1   KBP005     15t   8 900755-02   DIODE, BRIDGE 4A 50V   CR3   KBL-02     15t   8 900755-02   CRYSTAL /6MHe   Y1     15t   8 3255/3-01   COIL, INDUCTOR 224H   LB LII     15t   8 3255/3-02   COIL, INDUCTOR 224H   LB LII     15t   8 3255/3-02   COIL, INDUCTOR 224H   LB LII     15t   8 3255/3-02   COIL, INDUCTOR 224H   LB LII     15t   8 90.1528-04   VOLTAGE REGULATOR 2V 1.5A   VR.     15t   8 90.4528-01   VOLTAGE REGULATOR 5V 3A   VR.     15t   8 90.4550-05   SOCKET IC LOW PRO, 40PIN     15t   8 90.453-03   SOCKET IC LOW PRO, 24PIN		8	-	6	11-876008	5.11 SOOMW # 5%	7/2	INS231 SUB. FOR ITEM 52
St   G   G   G   G   C   K   G   G   C   K   G   G   G   G   G   G   G   G   G		7	1.38	į,	900756-01	1.5A 50V		
1.07   8   900556-02   CRYSTAL   6MH*		7	5		1	4A 50V	2	K87-05
157   8   900556-02   CRYSTAL   JAMHE   Y   Y       158   8   3255/3-02   COLL, INDUCTOR   22µH   L1       159   8   3255/3-02   COLL, INDUCTOR   22µH   L1   L1   L1     26   8   3255/3-02   COLL, INDUCTOR   22µH   L1   L1   L1     27   28   9   90.528-01   VOLTAGE   REGULATOR   2V   15H   L1   L1   L1     28   8   90.528-01   VOLTAGE   REGULATOR   SV   3H   INSULATION   MYLAR   TO-3   ATTACHED   WITH   VOLTAGE   SOLVET   IC LOW PRO, 24 PIN   P3, P4   HOSHIDENK!   TCS 4460     28   9   90.336   CONNECTOR   DIN   6 PIN   P3, P4   HOSHIDENK!   TCS 4460     29   10   10   10   10   10   10   10   1			5	\ \				
15			1	_	F	RYSTAL IGMHE		
1.59 B   3255/3-01   COIL, INDUCTOR   C24H   L1   L1   L1     2 60 B   3255/3-02   COIL, INDUCTOR   C24H   L1   L1   L1     3 6/			+	-				
2 60 8 3255/3-02 COIL, INDUCTOR REMH LB.LII  54 8 3255/3-03 COIL, INDUCTOR ROWH LT.LI.LIO  54 8 3255/3-03 COIL, INDUCTOR ROWH LT.LI.LIO  55 8 90/528-04 VOLTAGE REGULATOR L2V 1.5A VR 1  56 8 9 904528-01 VOLTAGE REGULATOR SV 3A VR 2  56 8 9 9049/4 INSULATION MYLAR TO-3  56 8 9 9049/4 INSULATION MYLAR TO-3  57 8 9 90336/1 CONVECTOR DW 6PIN P3.P4 HOSHIDENKI TCS4460  57 8 9 904/50-06 SOCKET IC LOW PRO, 24PIN  57 8 9 904/53-03 SOCKET IC LOW PRO, 24PIN			1	-	325513	77 WH	-	
3 61 8 \$25513-03 COIL, INDUCTOR LOOWH LT, LY, LIO  2 62 8 9 90.528-04 VOLTAGE REGULATOR SV 3A WR? LM320-72  2 65 8 90.528-01 VOLTAGE REGULATOR SV 3A WR? LM323  2 65 8 90.528-01 VOLTAGE REGULATOR SV 3A WR?  2 65 8 90.528-01 INSULATION MYLAR TO-3  2 68 8 90.4974 INSULATION SILICONE TO-3  2 68 8 90.4550-06 SOCKET IC LOW PRO, 40PIN  2 77 8 90.4153-03 SOCKET IC LOW PRO, 24PIN		. ^			3756/3	12 MH	8 L11	
43   8   90.528-04   VOLTAGE REGULATOR (2V.154)   VR!   LM340-/2   LM323   LM323   LM323   LM323   LM323   LM323   LM323   LM323   LM3240-/2   LM3249/4   LM3244TION MYLAR   TO-3   SUBSTITUTION FAR ITEM   ST. CONNECTOR DIN 6 PIN   P3.P4   HOSHIDENK! TCS4460   LMSULATOR DIN 6 PIN   P3.P4   HOSHIDENK! TCS4460   LMSHIDENK! T		n	_	-	375513		7 1 7 110	
1         &3         B         90.528-04         VOLTAGE REGULATOR 12V 1.5A         VR1         LM323           2         &5         B         90.528-01         VOLTAGE REGULATOR 5V 3A         VR2         LM323           2         &5         B         90.4914         INSULATION MYLAR         TO-3         ATTACHED WITH VOLT           \$         &6         B         90.4914         INSULATION MYLAR         TO-3         SUBSTITUTION FOR ITELY           \$         &6         B         90.4914         INSULATION MYLAR         TO-3         SUBSTITUTION FOR ITELY           \$         &6         B         90.03361         CONNECTOR, DIN 6PIN         P3.P4         HOSHIDENKI TCS4460           \$         \$         B         90.04153-03         SOCKET IC LOW PRO, 20 PIN         ADPIN           \$         \$         \$         \$         \$         \$		1	_	+				
1         44         B         90.528-0/         VOLTAGE REGULATOR SV 3A         VR2         1M323           2         65         B         90.49/4         INSULATION MYLAR         TO-3         ATTACHED WITH VOLT           5         65         B         90.49/4         INSULATION SILICONE TO-3         SUBSTITUTION FOR ITEM           2         65         B         90.336/         CONNECTOR, DIN 6PIN         P3.P4         HOSHIDENKI TCS 4460           3         70         B         90.4/50-06         SOCKET IC LOW PRO, 20 PIN         20 PIN           2         7/1         B         90.4/53-03         SOCKET IC LOW PRO, 24 PIN			1		90,528	12V 1.5A	/ 4	LM340-12
2 65 B 904914 INSULATION MYLAR TO-3 5 66 B 325551-01 INSULATION SILICONE TO-3 5 68 B 903361 CONNECTOR, DIN 6 PIN P3, P4 HOSHIDENKI TCS 4460 2 68 B 904150-06 SOCKET IC LOW PRO, 24 PIN 2 77 B 904153-03 SOCKET IC LOW PRO, 24 PIN			1	-	901528	5V 3A	42	LM323
\$ 66 B         325551-01         INSULATION         SILICONE         70-3         SUBSTITUTION FAR ITEM           2 68 B         9 0 3 3 6 I         CONNECTOR. DIN 6 PIN         P3.P4         HOSHIDENKI TCS 4460           3 70 B         9 0 4 I 5 0 - 06         SOCKET IC LOW PRO. 40 PIN           2 71 B         9 0 4 I 5 3 - 03         SOCKET IC LOW PRO. 24 PIN		~	26			7.0		ATTACHED WITH VOLT REGULATOR
2 68 B 903361 CONNECTOR. DIN 6PIN P3.P4  52 71 B 904150-06 SOCKET IC LOW PRO. 40PIN  2 71 B 904153-03 SOCKET IC LOW PRO. 24PIN		Ŋ	Ş		325551-	WE		SUBSTITUTION FOR ITEM 65.
2 68 B 903361 CONNECTOR, DIN 6PIN P3.P4 3 70 B 904150-06 SOCKET IC LOW PRO, 40PIN 2 71 B 904153-03 SOCKET IC LOW PRO, 24PIN			9	7				
3 70 B 904/50-06 SOCKET IC LOW PRO, 40PIN 2 71 B 904/53-03 SOCKET IC LOW PRO, 24PIN		7	T		9033	NIG9	1, P4	HOSHIDENKI TCS 4460-01-101
3 70 B 904/50-06 SOCKET IC LOW PRO, 40PW 2 71 B 904/53-03 SOCKET IC LOW PRO, 24PW				8				
2 71 B 904153-03 SOCKET IC 10W PRO. 24 PIN		n		-	13/	LOW PRO.		
		7	-	_	904153	]		
			7	7				- 1
			-	ここ	ンシンマン	(1/2/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1		1/2/1/0/1-12

PART / DASH NO	PART / DASH NO.	(402	*	PART NUMBER	DESCRIPTION	z	REF. DES	NOTES	<b>v</b>
	10-120-150-150								
		1 73	3 8	325514-04	HEADER ASSY 2.5 PICH	H RANG. 4PM	P2	MOLEX 5049	5049-0446
		1 24	-	325515-06			P7	3094-06A	-06A
	IS L	1	-	375515-15		15PW	94	3094-151	151
	10	2 %	α	375515-03	DIA S.C. A	25 DICH PANG. 3 PM	PS. P8	3094-034	03 A
		+	+		HEADER ASSY 3.96 PICH	40	P1	MOLEX 5271-04A	. 04A
		7.8	_						
	IS I	1 29	at)	900/00-03	CAP, ELECTROLYTIC .	220 MF/25V	592		
		1,80	-	400 101-44	2	10000 F 16 V	C52	AXIAL LEAD P22x 52	52
		/& /	_			6800aF 25V	CS1	•	55
	7	2 82	_	900100-33		474F 16V	C2, C5		
	•	-	-	900100-32	ELECTROLYTIC	1 MF 25 V	C1.C4		
		/	-	900402-15	TANTALIUM	104F 25V	C/2		
		\ \		11-200000	TANTALIUM	3.3 MF 25V	C23		
	`	/ 86	-	900000-51	CERAMIC	68PF 50V	0/0		
		181		900000-52		150PF 50V	C33	± 5%	
	7	2 88	_	900010-53		330PF 50V	C28, C49	± 5%	
	e)		_	900010-54		680PF 50V	C16, C27, CSD	+5%	
		06 /	_	900010-25		1000PF 50V	625		
	40	16 00		900010- 20	<b>A</b>		G.6-9,11,19,14,11	-22 24,79-32,34-48,53-65,57,60,61	19.05
	2	26 2		11-010006	CERAMIC	0.022 NF 50V	CSB.CSP		
		/ 03	-	01-00/006	7/2	100MF16 V	C56		
	7	2 94	8	900402-17	_	0.47 JE 16V	CK,CM	± 20%	
	-	1 95	_		TANTALIUM	4.72/25V	<b>29</b> 2		
		76	00	900402 - 14	CAP. TANTALIUM	101/34/	C63		
		1	8		CAP. CERAHIC 0	033,	297		
	7	2 98		90/-055/06	RESI	1 KW 5% 3600	RX, K30		
	<i>'</i>	66 /	18		_	14W 5% 47A	æ.		
	4	4 100	9	901550-89	RESISTOR CARBON A	1/4W 5% 1500	RR.19.35.36		
	*	4 101		9015.50-52		220n	R4,16.17.45		
	10	5 102	2	401550-14		3300	RI.E, 5.20.37		
	9	6 103	E	901550-58		4700	RZZ, ZZ, CZ, 50, 55, 57		
	7		F	9015,50-38		2100	424		
	z,	5.05	Ţ	90/550-31		0089	R9, K39-R42		
	B	8 106	2	901550-01			RL,11,31-34,44,5		
	4	4 107	7	Ò		2 Ka	RZ1-KZ3, R38		
	9	6 108	BB	901550-18	RESISTOR CARBON LAW 5%	2.2KA	PR.15,78,51.62,66		
c b m EN	ENGINEERING	1	TITLE	000				DATE SIZE	
			-						

9 90/550-69 RESISTOR, CARBON KAN 5% 15570 AND 9 90/550-12 9 90/550-12 8 90/550-12 8 90/550-07 RESISTOR, CARBON KAN 5% 15570 AND 9 90/550-07 8 80/550-07 8 80/550-07 8 80/550-07 8 80/550-44 8 80/550R, METAL OXIDE KAN 1% 1000 AND 9 90/550-44 8 80/550R, METAL OXIDE KAN 1% 1000 AND 9 90/550-44 8 80/550R, METAL OXIDE KAN 1% 91 KM 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	10   20.155.0 - 69   RESISTOR, CARBON KIN SK, LISKOR   No. 18   19.0155.0 - 69   RESISTOR, CARBON KIN SK, LISKOR   No. 18   19.0155.0 - 62   RESISTOR, CARBON KIN SK, LISKOR   No. 18   19.0155.0 - 69   RESISTOR, METAL ONDE KIN K. (20.01)   No. 18   19.0155.0 - 69   RESISTOR, METAL ONDE KIN K. (20.01)   No. 18   19.0155.0 - 64   RESISTOR, METAL ONDE KIN K. (20.01)   No. 18   19.0155.0 - 64   RESISTOR, METAL ONDE KIN K. (20.01)   No. 18   19.0155.0 - 64   RESISTOR, METAL ONDE KIN K. (20.01)   No. 18   19.0155.0 - 64   RESISTOR, METAL ONDE KIN K. (20.01)   No. 18	QUANTITY REGO PER PART/DASH NO.		MELL	.20	PART NUMBER	DESCRIPTION	REF. DES	NOTES
1 00 8 901550-69   RESISTOR, CARBON KIN 55 Lista   Ned 10 8 901550-69   RESISTOR, CARBON KIN 55 Lista   Ned 10 8 901550-12   RESISTOR, CARBON KIN 55 Lista   Ned 10 8 901550-12   RESISTOR, CARBON KIN 55 Lista   Ned 10 8 901751-43   RESISTOR, METAL ONDE KIN 15 COLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 COLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 COLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 COLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 COLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 GOLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 GOLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 GOLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 GOLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 GOLD   Ned 10 901751-45   RESISTOR, METAL ONDE KIN 15 GOLD   NED 10 901751-45   RESISTOR   NEG 10 9	1   1   100   8   90.155.0-8   RESNIOR, CARBON KIN 5\$ 1,550   Read of the state o	80	120 60	_					
4   10   6   90.1550-12   1   2244  Minht 53   10   10   10   10   10   10   10   1	4   4   10   6   90.550-12   RESISTOR, LARBON WW. S. 2000   No. 144     2   2   2   11   8   90.1751-63   RESISTOR, LARBON WW. S. 2000   No. 144     1   1.   1.   1.   1.   1.   1.   1			5077		Ш	112KU	83	
2 111 B 90.550-07 RESISTOR CARBON MN SS 100K1 Nº MS  1113 B 90.7551-43 RESISTOR CARBON MN SS 100K1 Nº 1143 B 90.7551-44 RESISTOR METAL ONDE MN IK GOL MS  2 145 B 90.7551-44 RESISTOR METAL ONDE MN IK GOL MN IN IN IN 12 148 B 90.7551-44 RESISTOR METAL ONDE MN IK GOL MN IN IN IN 14	1   2   2   11   8   90 is 570-07   RESISTOR, CARBON WAY SK, 100kg   Nº Mª     1   11   2   2   2   1   2   3   RESISTOR, CARBON WAY   Nº Mª     1   11   3   2   2   1   5   4   RESISTOR, METAL ONDE WAY KORD   Nº Mª     1   11   4   8   90 is 573-4   RESISTOR, METAL ONDE WAY KORD   Nº Mª     2   2   12   4   8   8   8   8   8   8   8   8   8						22KA	1,29,53	
1/2   8   90 / 75/- 43   RES.S.G. POR, METAL ONDE WAY IK GOLD   MT     1/4   8   90 / 75/- 43   RES.S.G. POR, METAL ONDE WAY IK GOLD   MT     1/4   8   90 / 75/- 44   RES.S.G. METAL ONDE WAY IK GOLD   MT     1/4   8   90 / 75/- 45   RES.S.G. METAL ONDE WAY IK GOLD   MT     1/4   8   90 / 75/- 45   RES.S.G. METAL ONDE WAY IK GOLD   MT     1/5   8   40 / 75/- 45   RES.S.G. METAL ONDE WAY ICO-3     1/5   8   40 / 75/- 45   RES.S.G. METAL ONDE WAY ICO	1   1/2   2   20.7   51 - 23   RES.S.TOR. METAL OXUDE WATEL OXUD				_			3, A46	
1,13   B   90 / 75   -83   RESISTOR, METAL ONDE WN   M9     1,14   B   90 / 75   -84   RESISTOR, METAL ONDE WN   GOOD   M9     2,14   B   90 / 75   -85   RESISTOR, METAL ONDE WN   GOOD   M9     2,14   B   90 / 75   -45   RESISTOR, METAL ONDE WN   S	1   1/2   8   90.715/-42   RESISTOR, METAL CANDE WAY \$\text{Math \$\text{Cond} \text{ may} } \			_	_				
1   10   8   \$\text{GO 1751-18}   \$\text{RESISTOR} \text{METAL ONDE \$\text{AM 18} (000)   \$\text{MS}\$   \$\text{ACT 151-18}   \$\text{RESISTOR} \text{METAL ONDE \$\text{AM 18} (000)   \$\text{MS}\$   \$\text{ACT 151-44}   \$\text{RESISTOR} \text{METAL ONDE \$\text{AM 18} (000)   \$\text{MS}\$   \$M	1			, , ,	1	L.,		2	
1.15	1   List B   QOI755 -44   RESISTER, METAL ONDE WIT F 21 KB   RTL NO   2   2.66   ROLTS1 -45   RESISTER, METAL ONDE WIT F 21 KB   RTL NO   2   2.66   ROLTS1 -45   RESISTER, METAL ONDE WIT F 21 KB   RTL NO   2   2.72   RESISTER   READ   READ   RESISTER   READ   RE			1//4		_		**	
2 16 6 901751-45 RESSIDE METL ONDE WITH 91 KI RILLAND  1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/	2 2.46 6 90.731-45 RESURE WITH ONDE WITH 9.1 KM RILLIA AND ANDE WITH 9.1 KM RILLIA AND AND AND AND AND AND AND AND AND AN		<u> </u>	1	+	<u> </u>		**	
10   10   10   10   10   10   10   10	10   10   10   10   10   10   10   10		10	-	-	<u> </u>		0. 6.40	
12   12   12   12   12   12   12   12	10   12   12   12   12   12   12   12		1	4		10/10/			
120   12-14_10-14    120   12-14_10-14    120	10   12   12   12   12   12   12   12		I	,	$\downarrow$				
20   20   20   20   20   20   20   20	10   12   12   12   12   12   12   12		I	7	1				
12   8   903025-01   EERRITE BEAD   12-14.0n-148     12   8   4022048   SHIELD BOX     12   8   4022047   SHIELD BOX     12   8   540011   HEAT SINK REQUATOR     13   904907-01   CAMBOUND THER FOR HEAT SINK     14   15   905800-02   SCREW PAN HEAD M3x10     14   15   8   90560-03   NUT HEX. M3     15   8   905670-03   NUT HEX. M3     15   8   905477-02   TUBE VINYL   #35x + 540     15   15   15   15   15     16   16   16   16     17   17   17     18   18   18   18     18   18   18	10   122   8   90.3025-01   EERRITE BEAD   12-14,10-14     12   2124   8   40.02048   SHIELD BOX     12   2125   8   154.00-17   SHIELD CAP     12   2   12   2   12   2     13   4   13   2   2   2   2     14   13   3   2   2   2   2     15   15   2   2   2     15   15   2   2   2     15   15   2   2   2     15   15   2   2     15   15   2   2     15   15   2   2     15   15   2		1	3)/	1				
A   22   A   22   22   22   22   23   23	10   042  8   90.3025-0  FERRITE BEAD   12-16,07-16   1/22   1/			121					
122   2   2   2   2   2   2   2   2	122   2.028   4.022.004   5.41ELD BOX   2.2.028   4.022.004   5.41ELD BOX   2.2.028   4.022.004   5.400.7   4.022.04   5.400.7   4.022.04   5.400.7   4.022.04   5.400.7   4.022.04   5.400.7   4.022.04   5.400.7   4.022.04   5.400.7   6.000.000.02   5.000.000.000.02   5.000.000.000.02   5.000.000.000.02   5.000.000.000.02   5.000.000.000.02   5.000.000.000.000.02   5.000.000.000.000.000.000.000.000.000.0					903025	ERRITE BEAD	917-217'	
2.24   B   4022048   SHIELD BOX   2.24   B   4022047   SHIELD CAP	2   2   124   8   4022048   SHIELD BOX   2AP	- 415		122					
2 128  8 4022048	2 2 124 8 4022048 SHIELD BOX 2 2 125 8 4022047 SHIELD CAP 2 2 125 8 4022047 SHIELD CAP 3 1 125 8 1540013 HEAT SWK REGWATOR  1 1 125 8 1540013 HEAT SWK REGWATOR  1 1 125 8 154001 HEAT SWK REGWATOR  1 1 125 8 154001 HEAT SWK REGWATOR  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			123					
2 125 B 4022047 SHIELD CAP 2 126 B 1540023 HEAT SINK TO-3 1 127 B 1540021 HEAT SINK REGULATOR 1 127 B 1540011 HEAT SINK REGULATOR 1 128 904907-01 COMPUND THER FOR HEAT SINK 1 12 B 905800-02 SICREW PAN HEAD M3x10 4 134 B 905860-03 AUT HEX. M3 4 135 B 905960-03 AUT HEX. M3 4 136 B 905417-02 TUBE VINKL #35x L5mm 1 138 1 140 1	2 2 125 6 4022047 SHELD CAP 2 2 126 B 1540023 HEAT SINK TO-3 4 122 B 154001 HEAT SINK REGULATOR AND THER FOR HEAT SINK AND AND THER FOR HEAT SINK AND AND AND HEAD M3x10 4 4 135 B 905800-02 SGREW PAN HEAD M3x10 4 4 135 B 905800-02 TUBE VINYL #35x L5mm AND		7	_	_	<del> </del>	J		
2.126 B	2 2.126 B 1540023 HEAT SINK REQUIATOR  1. 127 B 540011 HEAT SINK REQUIATOR  1. 127 B 540011 HEAT SINK REQUIATOR  1. 128 GOAGOO-02 SIKEW PAN HEAD M3x10  4 4.132 B 905650-03 EXTERNAL TOTH WASHER M3  4 4.33 B 905407-02 TUBE VINYL #35x L 5 mm  4 4.30 B 905417-02 TUBE VINYL #35x L 5 mm  5 5 5 5 5 mm  5 5 5 5 5 5 mm  5 5 5 5		-	_		₩-			
120   154 00 11   HEAT SINK REQUEATOR   120   154 00 11   HEAT SINK REQUEATOR   MITH TIEH 63   120 4907 -01   COMBOUND THER FOR HEAT SINK   COMBOUNCTION WITH THE 63   131   132   130 150 150 150 150   131   132   135   1	1		10	_	_	1			
K (28   904907-01   COMPOUND THER FOR HEAT SINK   CONJUNCTION WITH ITEH 63     129	Mk   Mk   Mk   Mk   Mk   Mk   Mk   Mk		<u> </u>	-		1	4/4/0		
12   904907 -01   COMPOUND THER FOR HEAT SINK   CONSUNCTION WITH 1TEH 63   12   12   12   12   12   12   12   1	129   904907-01   COMPOUND THER FOR HEAT SINK   CONJUNCTION WITH TITEH 63   128   905800-02   SCREW PAN HEAD M3x10   4 4.35 B 905655-03   EXTERNAL TOOTH WASHER M3   4 4.35 B 905660-03   NUT HEX. M3   4 4.35 B 905477-02   TUBE VINKL #35x L5mm   120			_	-	110045	HEAL SINN KETULHIUN		
4 32 8 906800-02 SCREW PAN HEAD M3×10 4 34 8 905655-03 EXTERNAL TOOTH WASHER M3 4 35 8 905960-03 AUT HEX. M3 4 37 8 905977-02 TUBE VINYL #35× L5mm  4 40 440 440 440 440 440 440	4 4 12 8 906800-02 SCREW PAW HEAD M3x/0 4 4 135 8 905655-03 EXTERNAL TOOTH WASHER M3 4 4 135 8 905760-03 AUT HEX. M3 4 4 135 8		ζ,			.	COMPOUND THER FOR HEAT SINK		WITH ITEM
4.32 B 906800-02 SCREW PAW HEAD M3x/0 4.32 B 905455-03 EXTERNAL TOOTH WASHER M3 4.35 B 905860-03 NUT HEX. M3 4.37 B 905477-02 TUBE VINYL #35x L5mm 4.39 4.40 4.41 4.42 4.42 4.44 4.45 4.45 4.45 4.45 4.45	4 4 432 B 905800-02 SCREW PAN HEAD M3x10 4 4 435 B 905860-03 AUT HEX. M3 4 4 436 B 905860-03 AUT HEX. M3 4 4 436 B 9058477-02 TUBE VIANL #35x L5mm  4 4 436 4			729					
4 32 B 906800-02 SCREW PAN HEAD M3x/0 4 34 B 905655-03 EXTERNAL TOOTH WASHER M3 4 35 B 905960-03 NUT HEX. M3 4 37 B 905977-02 TUBE VINYL #35x L5mm 38 4 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4 4 412 B 906800-02 SCREW PAN HEAD M3x10 4 4 435 B 90565-03 EXTERNAL TOOTH WASHER M3 4 4 435 B 905960-03 AUT HEX. M3 4 4 430 B 905970-03 TUBE VINYL #3.5 x L S.a.n.  AND AND AND AND AND AND AND AND AND AN			77.					
4 12 8 906800-02 SCREW PAN HEAD M3×10 4 135 8 905655-03 EXTERNAL TOOTH WASHER M3 4 136 8 905960-03 NUT HEX. M3 136 4 137 8 905477-02 TUBE VINYL #35× L5mm 138 140 140 140 141 142 143 144 145 146 147 148 148	4 4 432 8 906800-02 SCREW PAN HEAD M3x/0 4 4 435 8 905960-03 AUT HEX. M3 4 4 32 8 905960-03 AUT HEX. M3 4 4 32 8 905977-02 TUBE VINYL #3.5 x L 5 am 4 4 32 8 905477-02 TUBE VINYL #3.5 x L 5 am 4 4 43 6 905477-02 TUBE VINYL #3.5 x L 5 am 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			13/					
4 135 B 905655-03 EXTERNAL TOOTH WASHER M3 4 135 B 905960-03 NUT HEX. M3 4 131 B 905477-02 TUBE VINYL #35× L5mm 138 139 140 140 140 140 140 140 140 140 140 140	4 4 34 8 905455-03 EXTERNAL TOOTH WASHER M3 4 4 35 8 905960-03 NUT HEX. M3 4 4 32 8 905960-03 NUT HEX. M3 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 4 35 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 4 35 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 4 35 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 4 35 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 4 4 32 8 905477-02 TUBE VINYL #3.5 x L. S.m.m 4 5 905477-02 TUBE VINYL #3.5 x L. S.m.m 5 90			_			SCREW PAN HEAD M3×10		
4 135 B 905960-03 NUT HEX. M3  4 131 B 905477-02 TUBE VINYL #35x L5mm  138  40  41  42  42  42  435  445	4 4 435 B 905960-03 NUT HEX. M3  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 437 B 905477-02 TUBE VIAML #35× L54m  4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4						Λ.		
4.37 B 905477-02 TUBE VINYL #35x L5mm  4.39 40 440 442 443 4445	4 4 37 B 905477-02 7UBE UMML #3.5 x L. S.am.  138 138 140 140 140 140 140 140 140 140 140 140					L			
4 37 B 905477-02 TUBE VINYL #35x L5mm  138  40  41  42  42  43	4 4 37 8 905477-02 TUBE VINYL #3.5x L 5 mm  38 39 40 41 42 43 43 443 443 443 443 4443 445 70.00000000000000000000000000000000000					<u> </u>	1		
138   138   139	138   40   41   42   43   43   43   44   44   44   44			_		Ļ	#25x		
	137   140   142   142   143			_		ــــ			
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	43 ASINEERBYG TITLE: DRAWH BY: DATE BIZE LA COLOR			1	<u> </u>			-	
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	ENGINEERING OACO, LOCALO DRAWN BY: DATE SIZE LA COLO.			14					
	ENGINEERING CON	78		¥	إ				





PART NO.	DESCRIPTION	A Proly PHODICITION. KELEASE 67
1540002 -01 P	POWER SUPPLY ASSY VIC-1546 UL	Sulp CHWGED
		E 9/2/ CHINGED ACCESSORY OF TRUNSFRAMER 7.1 1/4 CHINGED SCAFW TO H3-6 FROM H3-8.  E 1/2/ CHINGED DISH OF THRU 10 MID 175H Z. 7.7 1/4 ADDED 175H 8.4 MID 63.  F 1/2/ ADDED SMET 5 OF 5.
90-	VIC-1541 UL	G 2/8/ks REVISED PER ECO 830060 AS
		4. NO CHANGE RÎY FOR ITEM SA IF USED ITEM 6 OR 7. 3. USE ONLY WHEN USED ITEMB OR 9.
		2. IF ITEM B OR 9 ARE USED THEN GIY FOR ITEM 54 WILL CHANGE FROM 7 TO 9 PCS AND USED WITH ITEM 63.  1. SHEET 4 & 5 OF 5 ARE D-SIZE ASSY DWG. NOTES.
C bm ENGINEERING	PONER SUFFER ALLI VIC-1500 CHRDZ LAS	1540002   100   10

PART/DASH NO.	EN	·8	PART NUMBER		DESCRIPTION	REF. DES	NOTES
10 09 08 07 06 05 04 03 02 01		.a					
8	_	0	1540012	POWER	CHASSIS		SUBSTITUTE FOR ITEM 2, SEE NOTE
\ <u>\</u>	20	9	251153	POWER	CHASS/S		SEE NOTE 3
	_ م		1540001 -0	)1 PCB	ASSY (ECC) UL		
Ţ <u></u>	S	9/0	1540001 - 02				
S			1540001 -03		ASSY (FCC) UL		SUBSTITUTE FOR ITEM 6
	- 1	%	1540001 -04				SUBSTITUTE RE ITEM 9
-		ß	1540048 - 01	1 82	ASSY (FCC) UL		USED LOGIC ARRAY
	တင္	Ø	1540048-02	2 PCB	ASST		USED LOGIC ARRAY
	2 =						
S	\$ 12	8	325519 - 01	FLOPPY	DISK (BLACK)		SUBSTITUTE FOR 1TEM 13
_	113	20	325519 - 02	_	DISK		
_	114	Β	903614 -0	1 Fuse	LDER FI		
	15						
	<u>0</u>	8	903615 -01	FUSE	HOLDER FH 033		
<u> </u>	≥@						
	119	Θ	904509 -0	JI SWITCH.	ROCKER	S W 1	
ı							
S	\$ 21	А	325552-01	FILTER	POWER CONNECTOR		SUBSTITUTE FOR ITEM 23 ( TOKIN)
	22				1		SUBSTITUTE FOR ITEM 23
	32						Checking and the test of the the
_	- 13°	ac,	903467 -0	03 FILTER	POWER CONNECTOR		2
	8		į,				576x 20 mm
<u> </u>	11 27	8	903555 -2	20 FUSE, SI	SLO BLO 250V 1.0A		6.3" x 30 mm
	3		0				
-\ <u>v</u>	7; C - 0	ے د	1540009 -01	POWER	TRANCFORMER JEN 120/KOV	  -  -	
	_					-	
4	4 33	<b>60</b>	325548-04		SCREW AW HEAD WITH SPRING WASHER MS-10		TO BE ATTACHED WITH X-FORMER
	718						
	38						
c b m ENGINEERING	TITLE	üį			DRAWN BY: DATE	]-	OATE SIZE

1   10   8   200017 - 03   1EAD WIRE CHACK)   2005 446-48   4   200017 - 03   1EAD WIRE CHACK)   2005 446-48   4   200017 - 03   1EAD WIRE CHACK)   2005 446-48   4   200017 - 03   1EAD WIRE CHACK)   2005 446-48   4   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 03   200017 - 20   200017	1   20   2   2000	QUANTITY REQD PER PART/DASH NO.	MGL	<b>'5</b> '0	PART NUMBER	DESCRIPTION REF. DES	MOTES
1   140 B   200017 - 03   LEAD WIRE (BLACK)   2005 ANG-18 L     140 B   200017 - 04   LEAD WIRE (BLACK)   2005 ANG-18 L     140 B   200017 - 04   LEAD WIRE (BLACK)   2005 ANG-18 L     140 B   200017 - 04   LEAD WIRE (BLACK)   2005 ANG-18 L     140 B   200017 - 04   2005 ANG-18 L     140 B   200017 - 05   11BING SHRINCABLE   45 x 20     140 B   305476 - 02   11BING SHRINCABLE   44 x 40     151 A   150 B   3055476 - 02   11BING SHRINCABLE   44 x 40     151 A   150 B   3055476 - 02   11BING SHRINCABLE   44 x 40     151 A   150 B   3055476 - 02   50 REW PAN HEAD MAXE WEXT froorth WASHER PCB (S) , SEE IN ED TO S	1   10   10   10   10   10   10   10	90		0			
1 40 B   200017 - 03   LEAD WIRE (BLACK)   10.05 AMG-18 L.   140 B   200017 - 03   LEAD WIRE (BLACK)   10.05 AMG-18 L.   141 B   200017 - 04   LEAD WIRE (BLACK)   10.05 AMG-18 L.   141 B   1540010   GROUND CABLE ASSY   46   46   46   46   46   46   46   4	140   8   200017 - 03   1EAD WIRE (BLACK)   100.5 AME. 12 L AZUMU   140   8   2000017 - 04   1EAD WIRE (BLACK)   10.5 AME. 12 L AZUMU   140   8   2000017 - 04   1EAD WIRE (BLACK)   10.5 AME. 12 L AZUMU   1.44   8   1540010   6 ROUND   CABLE ASSY   6   2   2   2   2   2   2   2   2   2		37	-			
1   39   200017   -03   LEAD WIRE (BLACK)   2005 ANG-18   LA   LEAD WIRE (BLACK)   2005 ANG-18   LA   LEAD WIRE (BLACK)   2005 ANG-18   LA   LA   LEAD WIRE (BLACK)   2005 ANG-18   LA   LA   LA   LA   LA   LA   LA   L	1   40   8   200017 - 03   LEAD WIRE (BLACK)   10/5 ANG-1P L SO MAN   14   16   200017 - 03   LEAD WIRE (BLACK)   14   16   200017 - 03   LEAD WIRE (BLACK)   16   16   200017 - 04   16   200017 - 04   16   200017 - 05   10   20   20   20   20   20   20   20		æ	_			
140 B 200017 -03 LEAD WIRE (BLACK)	140 B 200017 -03 LEAD WINE (BLACK)		g B				
141   8   200017 -04   1 E AD WIRE (BLACK)   1015 ANG-19 1   43   43   43   43   44   43   44   43   44   44   45   45	1 41 B 200017 -04 JEAN WIRE (BLACK)   1015 AMF-1P 1 ROMM   42	_	140	8	7	LEAD WIRE	ANG-18 1
1 42   142   144   1540010   GROUND   CABLE ASSY   1 44   8   1540010   GROUND   CABLE ASSY   1 46   905476 - 02   TUBING SHRINCABLE   *5 x 20   406803-02   5CREW FIAT HEAD M3X #   ELLTER   50   905476 - 04   TUBING SHRINCABLE   *4 x 40   50   50   905476 - 04   TUBING SHRINCABLE   *4 x 40   50   50   905476 - 04   TUBING SHRINCABLE   *4 x 40   50   50   905476 - 03   SCREW PAN HEAD M3X	42   42   42   42   42   42   43   43		- 41	8		LEAD WIRE	1 81-8MA
1   443   1540010   GROUND   CABLE ASSY   45   45   45   45   45   45   45   4	1 44 8   1540010   GROUND   CABLE ASSY   45 x 20     1 48   8   905476 -02   TIBING SHRINGABLE   44 x 40     1 48   8   905476 -02   TIBING SHRINGABLE   44 x 40     1 48   8   905476 -02   TIBING SHRINGABLE   44 x 40     2 52   8   905476 -02   TIBING SHRINGABLE   64 x 40     3 50   905476 -02   TIBING SHRINGABLE   64 x 40     4 50   905476 -02   SCREW PAN HEAD M3X6 WENT north WASHER PCB (5), SEE NOTE 2     5		42				•
1 44   8   1540010   GROWND   CABLE ASSY     1 46   905476   -02   TUBING   SHRINCABLE   4x x 40     1 48   905476   -04   TUBING   SHRINCABLE   4x x 40     1 48   905476   -04   TUBING   SHRINCABLE   4x x 40     2 53   9 0547   -02   SCREW   PAN   HEAD   M3X 8   Ell. TER     2 53   9 25547   -02   SCREW   PAN   HEAD   M3X 8   Ell. TER     4 56   8 925547   -02   SCREW   PAN   HEAD   M4X6   WEXT   TOOTH   WASHER   GROUND     5 57   8 325542   -02   SCREW   PAN   HEAD   M4X6   WEXT   TOOTH   WASHER   GROUND     6 6 6 7   6 6 8   6 6 8   6 6 8   6 6 8   6 6 8     6 7   6 8   6 8   6 8   6 8   6 8   6 8   6 8     7   7   7   7   7   7   7   7   7	1   144   1540010   GROUND CABLE ASSY   45   45   42   42   42   43   43   43   44   44						
1   45   45   45   45   45   45   46   45   40   45   40   40   40   40   40	45   45   46   47   40   47   40   47   40   47   40   40	_		_	540010	ROUND CABLE	
1   46   905476 -02   TUBING SHRINCABLE   \$\sigma_{S} \times 20 \\   1   46   8   905476 -02   TUBING SHRINCABLE   \$\sigma_{A} \times 40 \\   1   46   8   905476 -02   TUBING SHRINCABLE   \$\sigma_{A} \times 40 \\   1   46   8   905476 -02   TUBING SHRINCABLE   \$\sigma_{A} \times 40 \\   5   6   8   905476 -02   SCREW ELAT HEAD M3X8   ELLTER     5   7   5   8   325547 -02   SCREW PAN HEAD M3X6   \times 40 \times 100000   Set of the control of the cont	1 46   905476 -02 TUBING SHRINCABLE   45 x 20     1 48   905476 -02 TUBING SHRINCABLE   44 x 40     1 48   905476 -02 TUBING SHRINCABLE   44 x 40     2 5   8   905476 -02 TUBING SHRINCABLE   44 x 40     2 5   8   905476 -02 TUBING SHRINCABLE   ELLTER CONNECTOR (2)     2 5   8   906670 -02 SCREW PAN HEAD M3X6 WEXT roard WASHER FOOD STREW PAN HEAD M4X6 WEXT roard WASHER   ELOPPY DISK (4)     2 5   8   925547 -02 SCREW PAN HEAD M4X6 WEXT roard WASHER   EROUND (2)     3 5   8   925547 -02 SCREW PAN HEAD M4X6 WEXT roard WASHER   EROUND (2)     4 5   8   905670 -03 SCREW PAN HEAD M4X6 WEXT roard WASHER   EROUND (2)     5 6   8   905670 -03 SCREW PAN HEAD M3X6 WEXT roard WASHER   EROUND (2)     6 6   6   6   6   6   6   6   6   6		45				
747   905476 -02   11BING SHRINCABLE   45 × 20   148   905476 -02   11BING SHRINCABLE   44 × 40   45   905476 -04   11BING SHRINCABLE   46 × 40   40   50   51   51   51   51   51   52 × 41 - 02   52 REW PAN HEAD M3X & W/EXT froath WASHER PCB (5) , SEE ILTER   53   8 × 55 × 41 - 02   52 REW PAN HEAD M3X & W/EXT froath WASHER   51   52 × 40 × 52 × 40 × 6   52 × 40 × 6   52 × 40 × 6   53   52 × 55 × 72 × 72 × 72 × 72 × 72 × 72 ×	747   905476 -02   TUBING SHRINGABLE   %5 x 20		46		,		
1 48 8 905476 -04 TIBING SHRINCABLE	1 48 B 905476 -04 TIBBING SHRINCABLE   44 × 40   50   50   40 × 40   50   50   40 × 40   50   50   40 × 40   50   50   40 × 40   50   50   40 × 40   50   50   40 × 40   50   50   40 × 40   50   50   50 × 40 × 40   50   50   50 × 40 × 40   50   50   50 × 40 × 40   50   50   50 × 40 × 40   50   50   50 × 40 × 40   50 × 40 × 40   50 × 40 × 40   50 × 40 × 40   50 × 40 × 40 × 40 × 40 × 40 × 40 × 40 ×	7	47	8	.	TUBING	\$5 x 20
40   40   40   40   40   40   40   40	49   49   49   49   49   49   49   49	_	- 48	Ф		THBING	\$4×40
50   50   60   60   60   60   60   60	50   50   50   50   50   50   50   50	-	<u>\$</u>				
2 52 8 906803-02 5CREW ELAT HEAD M3X8	2   2   2   2   2   2   2   2   2   2		S				
2 52 8 906803-02 5CREW ELAT HEAD M3X 8 EILTER 53 7 54 8 325341-02 5CREW PAN HEAD M3X6 W/EYT frorth WASHER PCB (5), SEE 1 55 8 906600-03 3CREW PAN HEAD M0.6-32 UNG 110 M 55 8 925542-02 5CREW PAN HEAD M4X6 W/EXT frorth WASHER GROUP GO CO	2   5   6   9   9   6   8   9   3   5   4   6   6   6   6   6   6   6   6   6		ū				
7   53   325541-02   SCREW PAIN HEAD M3X6 W/EXT MOOTH WASHER PCB (S)   SEE     4   56   9066/0-03   SCREW PAIN HEAD   N0.6-32 UNC LIOM   5   8   925542-02   SCREW PAIN HEAD   M4X6   WEXT   TOOTH WASHER   GROUD     5   8   9   9   9   9   9     6   6   6   6   6   6     6   7   7   7     7   7   7   7   7     7   7	53   325541-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER PCB (5), SEE NOTE 2   1 56   8 926542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER PCB (5), SEE NOTE 2   2 57   8 925542-02   SCREW PAN HEAD M4X6 W/EXT frootd WASHER   GROUND (2)   SS   SS 542-02   SCREW PAN HEAD M4X6 W/EXT frootd WASHER   GROUND (2)   SS   SS 542-02   SCREW PAN HEAD M4X6 W/EXT frootd WASHER   GROUND (2)   SS   SS 542-02   SCREW PAN HEAD M4X6 W/EXT frootd WASHER   GROUND (2)   SS   SS 542-02   SCREW PAN HEAD M4X6 W/EXT frootd WASHER   GROUND (2)   SS 542-02   SCREW PAN HEAD M4X6 W/EXT frootd WASHER   GROUND (2)   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   GROUND (2)   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd WASHER   SS 542-02   SCREW PAN HEAD M3X6 W/EXT frootd W3X6 W/	2	S	8	0-80890	SCRFW FIAT HEAD	
7 54 8 325341-02 SCREW PAN HEAD M3X6 W/EXT TOOTH WASHER PCB (5), SEE NOTE 2  55 8 925542-02 SCREW PAN HEAD M4X6 W/EXT TOOTH WASHER GROUND (2)  58 925542-02 SCREW PAN HEAD M4X6 W/EXT TOOTH WASHER GROUND (2)  58 63 8 1540051 METAL, L-ANGLE  65 65 66 66 66 66 66 66 66 66 66 66 66 6	T   St   B   325541-02   SCREW PAN HEAD M3X6 W/EXT frooth WASHER PCB (5), SEE NOTE 2     4   56   9   9   9   9   9   9   9     5   57   B   325542-02   SCREW PAN HEAD M4X6 W/EXT frooth WASHER   FLOPPY DISK (4)     5   57   B   325542-02   SCREW PAN HEAD M4X6 W/EXT frooth WASHER   GROUND (2)     5   6   6   6   6     6   6   6   6   6		53				
55   9266/2-03   STREW PAN HEAD NO.6-32 UNC LIO    4   56   8   925542-02   SCREW PAN HEAD MAY6 WEXT TOOTH WASHER GROUND (2)     58   925542-02   SCREW PAN HEAD MAY6 WEXT TOOTH WASHER GROUND (2)     59   60   61   62   63   64   64   65   65     60   60   60   60   60     60   60	4   56   9066/0-03   STREW PART HEAD NO.6-32 UNC LUGAR   FLOPPY DISK (4)     2   57   8   325542-02   SCREW PART HEAD MAX6 WEXT TOOTH WASHER GROUND (2)     5   5   5   5   5   5   5   5     5   6   6   6   6   6     6   6   6   6	7	54	8	325541-02	SCREW PAN HEAD MAX6 W/EXT HOOTH	PCB (\$) SEE NOTE
4   4   56   9.066/0-0.3   STREW PAN HEAD NO.6-32 UNC LIO	4   15   9   9066/0-03   SCREW PAN HEAD NO.6-32 UNC.10    2   57   8   325542-02   SCREW PAN HEAD MAX6 WEXT TOOTH WASHER GROUND (2)     59   60   60   60     61   62   63   1540051   METAL, L-ANGLE   SEE NOTE ?     65   65   65   65   65   65   65     66   66		R				
2   57   B   325542-02   5CREW PAN HEAD MAX6 WEXT TOOTH WASHER GROUND (2)   58   52   52   52   52   52   52   52	2   57   8   325542-02   5CREW PAN HEAD MAX6   VEXT   TOOTH WASHER   GROUND (2)	4	8	8	20-01990	SCREW PAN HEAD NO. 6-32 UNC LION	YAGOIJ
2 63 B   5400 S1 METAL, L-ANGLE 66 66 65 66 66 66 66 67 66 67 66 67 68 66 66 66 66 66 66 66 66 66 66 66 66	58	2	57	В	325542-02	SCREW PAN HEAD MAX6 WEXT	GROUN
59   60   60   60   60   60   60   60   6	59		<u></u>				
60   61   62   63 B   5400 51   METAL , L-ANGLE   65   66   66   66   66   66   66   6	Color   Colo		8				
2 63 B   5400 51 METAL , L-ANGLE 64 65 66 66 66 66 66 66 66 66 66 66 66 66	61   62   63 B   5400 51   METAL , L - ANGLE   SEE NOTE ?		8				
2 63 B 15400 51 METAL, L-ANGLE 64 65 65 65 66 66 66 66 66 66 66 66 66 66	Columbia   1540051   METAL   L-ANGLE   SEE NOTE   2   Columbia		9				
2 63 B 1540051 METAL, L-ANGLE 65 66 66 67 67 71 71 71 71LE.	Colorer   Color   Co		8	-			
65 66 67 68 70 71 71 72	GG   GG   GG   GG   GG   GG   GG   G	~					}
65 67 68 70 71 71 72	GS					+	1
66 67 68 70 71 71 72 71 72	C   C   C   D   C   D   C   D   C   D   C   C		8	-			
66 68 66 70 71 71 72	CO		8	+			
(GB) (CB) (CB) (CB) (CB) (CB) (CB) (CB) (C	CG		67	-			
70 71 72 111.E. DRAWN BV: 6ATE 622	CS		8				
70 71 72 111.E. DRAWN BV: 6ATE 622	10   10   10   10   10   10   10   10		9	+			
72   DRAWN BY:   DATE   SIZE	71		R	-			
TZ DRAWN BY: BATE SIZE	DOLVED CLIDDLY ACCY VICTORAL SV. BATE BATE SIZE STATE SIZE TITLES ACCY VICTORAL SV. BATE SIZE TATES SIZE SIZE SIZE SIZE SIZE SIZE SIZE SI		77	-	;		
TITLE:	ENGINEERING TITLE:  DANGE BING TATAS	<u></u>	2	-			
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